the intravenous method is not practicable. When the discomfort or the condition of the patient warrants it, both methods may be used. The use of calcium sulphide by mouth may be continued until all symptoms of mercurialism have disappeared, since it is non-toxic. Recovery has taken place, when the antidote was administered by mouth, as late as twelve hours after taking 7.5 grains of bichloride of mercury, and thirty hours when administered intravenously. The calcium sulphide solution must be freshly prepared for intravenous use or it loses its sulphur and becomes ineffective. Calcium sulphide solution should not be used stronger that 1 grain to 1 ounce of water. The solution should be boiled and filtered through cotton. The calcium sulphide solution, if deteriorated, will produce severe convulsions, owing to the free action of the calcium on the spinal cord, hence the necessity of a fresh solution. When calcium sulphide is to be given by mouth it should be administered, in the tablet or crude drug form, 2 to 5 grains every hour, until an excessive amount is taken. The author believes that local antidotes in the stomach in the form of the whites of eggs and lavage with large quantities of water is useless; bichloride of mercury is so quickly absorbed from the stomach that very little remains in the stomach unabsorbed at the end of five minutes. The vomiting by this time is so profuse that if any free bichloride of mercury were still present in the stomach it would not remain long enough to cause further damage. Wilms believes that calcium sulphide is the quickest, simplest and surest antidote for mercurial poisoning at the present time. He cites experimental and clinical evidence to warrant this belief.

The Neutralization of Virus of Poliomyelitis by Nasal Washings.—Amoss and Taylor (*Jour Exper. Med.*, 1917, xxv, 507) in a series of 56 experiments found that washings of the nasal and pharyngeal mucosæ possess definite power to inactivate or neutralize the active virus of poliomyelitis. This power is not absolutely fixed, but is subject to fluctuation in a given person. Apparently inflammatory conditions of the upper air passages tend to remove or diminish the power of neutralization. But irregularities have been noted, even in the absence of these conditions. The neutralizing substance is water soluble and appears not to be inorganic, it appears to be more or less thermolabile, and its action does not depend on the presence of mucin as such. It is suggested that the production of healthy carriers through contamination with the virus of poliomyelitis may be determined by the presence or absence of this inactivating or neutralizing property in the secretions. Whether this effect operates to prevent actual invasion of the virus and production of infection can only be conjectured. Probably the property is merely accessory and not the essential element on which defence against infection rests.

Pertussis Vaccine—Its Value as a Curative and Prophylactic Agent in Whooping-cough.—Luttinger (*Jour. Am. Med. Assn.*, 1917, lxviii, 1461) believes that the results obtained at the whooping-cough clinic and by over 180 private physicians and health officers warrants the routine administration of pertussis vaccine for both curative and prophylactic purposes. The best time to institute the vaccine treatment, except as a prophylactic, is the first and second week of the paroxysmal stage. When the proper vaccine is given and the method of the New York Health Department is employed, the disease is materially reduced in duration and severity. The presence of subconjunctival hemorrhages in prophylactic cases which were protected by the vaccine seems to point to its specific immunizing action against the paroxysms and to the fallacy of the hitherto accepted theory that these hemorrhages are due to the violence of the cough.

PEDIATRICS

UNDER THE CHARGE OF

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Observations on the Presence of Bacillus Abortus Bovinus in Certified Milk (Preliminary Notes).—FLEISCHNER and MEYER (*Am. Jour. Dis. Children.*, September, 1917, xiv, No. 3). Many workers have tried to show by experimental studies that raw milk is never a safe milk and that pasteurization is the only safe precaution. Some States have passed legislation requiring the pasteurization of all milk except certified milk. Some observers have shown that certified milk is not safe without pasteurization. The authors of this paper feel that in addition to the ordinary tests made by certifying commissions, specimens should be injected into guinea-pigs in order to observe whether or not tubercular lesions are produced. There is nothing in the literature in regard to such tests having been made with certified milk. The authors collected samples of certified milk from regular distributors and injected guinea-pigs with the specimens. Acid-fast bacilli were found in the spleens, lymph nodes, and sex organs. These were the Bacillus abortus bovinus. As a result of their work, and from a *résumé* of the literature, the authors express themselves as follows: "So far as can be concluded in a preliminary report from a limited amount of material it may be said: (1) Bacillus abortus is, for practical purposes, always present in the certified milk produced in the San Francisco Bay regions. (2) Tubercle bacilli are not present in this same milk in sufficient number to give tuberculosis to guinea-pigs, although this conclusion may prove incorrect on further experimentation. (3) If the above conclusion is correct there is no necessity for pasteurizing certified milk on account of any danger that it may possess as a disseminator of bovine tuberculosis to infants. (4) It is not unlikely that in many previous milk tests for tubercle bacilli the anatomical lesion of bovine abortion disease in the guinea-pig were mistaken for tuberculosis. (5) If the Bacillus abortus is present in certified milk to the extent evident from these experiments it is difficult to consider it pathogenic for infants without it, so far as it is known, ever having produced recognizable lesions on postmortem examination. (6) The result of this work, however, is one more definite indication that it is